City of Albuquerque
P.O. BOX 1293 ALBUQUERQUE, NEW MEXICO 87103

January 9, 2004

Tyler Ashton, PE
Tierra West, LLC
8509 Jefferson NE
Albuquerque, NM 87113

RE: Walgreens Drainage Report
Engineer's Stamp Dated 12-31-03 (B-10/D7)

Dear Mr. Ashton:

Based upon the information provided in your submittal received 12-31-03, the above referenced plan is approved for Site Development Plan for Subdivision, Site Development Plan for Building Permit action by the DRB, and Building Permit. Please attach a copy of this approved plan to the construction sets prior to sign-off by Hydrology. Prior to Certificate of Occupancy release, an Engineer Certification per the DPM checklist will be required.

This project requires a National Pollutant Discharge Elimination System (NPDES) permit. Refer to the attachment that is provided with this letter for details. If you have any questions please feel free to call the Municipal Development Hydrology section at 768-3654 (Charles Caruso) or 768-3645 (Brian Wolfe).

If you have any questions please call me at 924-3986.

Sincerely,

Bradley L. Bingham, PE
Sr. Engineer, Planning Dept.
Development and Building Services

C: Charles Caruso, CoA
file

THE CITY OF ALBUQUERQUE IS AN EQUAL OPPORTUNITY/REASONABLE ACCOMMODATION EMPLOYER

DRAINAGE REPORT

for

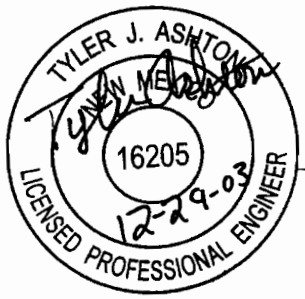
WALGREEN'S
Northeastern Corner of
Paradise Blvd. and Universe Blvd.
Albuquerque, New Mexico

Prepared by:

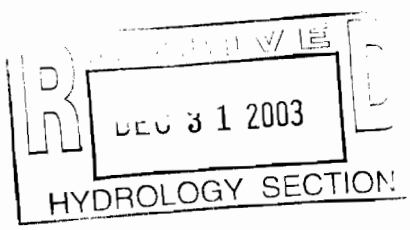
Tierra West, LLC
8509 Jefferson NE
Albuquerque, New Mexico 87113

December 2003

I certify that this report was prepared under my supervision, and I am a registered professional engineer in the State of New Mexico in good standing.



Job No 230051



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Map Pockets

Site Grading and Drainage Plan, Walgreens Store ..... Map Pocket A

Basin Map ..... Map Pocket B

Ventena Square at Ventana Ranch –Grading & Drainage Plan ..... Map Pocket C
Tracts G & H

PURPOSE

The purpose of this report is to provide the drainage management plan for the development of Tract G-3 within the Town of Alameda Grant, within the southwest one-quarter of projected Sections 10, Township 11 North, Range 2 East, New Mexico Principal Meridian, Bernalillo County, Albuquerque, New Mexico. This plan will be utilized for the re-development of the subject property as a Walgreen's Store. This plan is in accordance with the DPM, Chapter 22, Hydrology Section. The purpose of this report is to provide the drainage analysis and management plan for the new store.

INTRODUCTION

The subject of this report, as shown on the Exhibit A vicinity map, is a 1.9826-acre parcel of land located on the northeast corner of Universe Blvd. and Paradise Blvd. The site is in the City of Albuquerque, Bernalillo County, New Mexico and is currently undeveloped. The legal description of the property is Tract G-3, Ventana Square at Ventana Ranch. As shown on FIRM map 35001C0103D, the site does not lie within any flood zone.

EXISTING CONDITIONS

The site is currently undeveloped and slopes from southwest to northeast. The 1.98-acre is a part of the larger Ventana Square at Ventana Ranch, which totals 10.18 acres. Currently the entire 10.18-acre site drains to the Ventana Detention Facility. Easterling and Associates did a conceptual Grading and Drainage Plan for Ventana Square in March 2000 (B-10/D3C).

PROPOSED CONDITIONS

The proposed improvements consist of the construction of a 14,560 square foot Walgreen's and its associated parking lot with a drive through. The conceptual drainage plan is included in the appendix and will be followed. The site has been split into 2 basins; the storm runoff from these basins will flow to the northeast into a temporary pond that will be constructed to hold the 100-year 10-day storm. This pond is 3 feet deep with 3 to 1 side slope and has a capacity of 0.59 acre-ft. The pond will remain until the rest of the site is developed and at that point the runoff will drain to the Ventana Detention Facility according to the conceptual drainage plan Basin 1 includes the west parking area, the entire roof and a portion of the northern paved area and generates 4.45 cfs. Basin 2 includes the south parking area, the east paved area, and the remaining northern paved area and generates 4.52 cfs. The 100-year, 10-day volume of the runoff is 0.57 acre-ft. Land treatments of 0%A 10%B, 0%C, and 90% D were used to generate the runoff numbers.

SUMMARY AND RECOMMENDATIONS

This site conforms to the approved drainage plan by Easterling and Associates. The development of this site is consistent with the DPM, Chapter 22, Hydrology section. It is recommended this development be approved for rough grading and Site Plan for Building Permit.

EXISTING CONDITION

Total Area	=	94,445 sf
Impervious Area	=	94,445 sf
Pervious Area	=	0 sf

DEVELOPED CONDITION

Total Area	=	94,445 sf
Impervious Area	=	84,942 sf
Pervious Area	=	9,583 sf

Basin 1

Total Area	=	50,190 sf
Impervious Area	=	45,172 sf
Pervious Area	=	5009 sf

Basin 2

Total Area	=	44,255 sf
Impervious Area	=	39,814 sf
Pervious Area	=	4,443 sf

230051 Walgreens, Universe and Paradise

Weighted E Method

Zone #1

Developed Basins

												100-Year			100-Year/10-day		
Basin	Area (sf)	Area (acres)	Area (sq miles)	Treatment A %	Treatment A (acres)	Treatment B %	Treatment B (acres)	Treatment C %	Treatment C (acres)	Treatment D %	Treatment D (acres)	Weighted E (ac-ft)	Volume (ac-ft)	Flow cfs	Weighted E (ac-ft)	Volume (ac-ft)	Flow cfs
1	50190.00	1.152	0.00180	0%	0	10%	0.115	0%	0	90%	1.037	1.840	0.177	4.77		0.304	
2	44255.00	1.016	0.00159	0%	0	10%	0.102	0%	0	90%	0.914	1.840	0.156	4.20		0.268	
	94445.00	2.17			0.00		0.22		0.00		1.95		0.33	8.97		0.57	

Equations:

Weighted E = Ea*Aa + Eb*Ab + Ec*Ac + Ed*Ad / (Total Area)

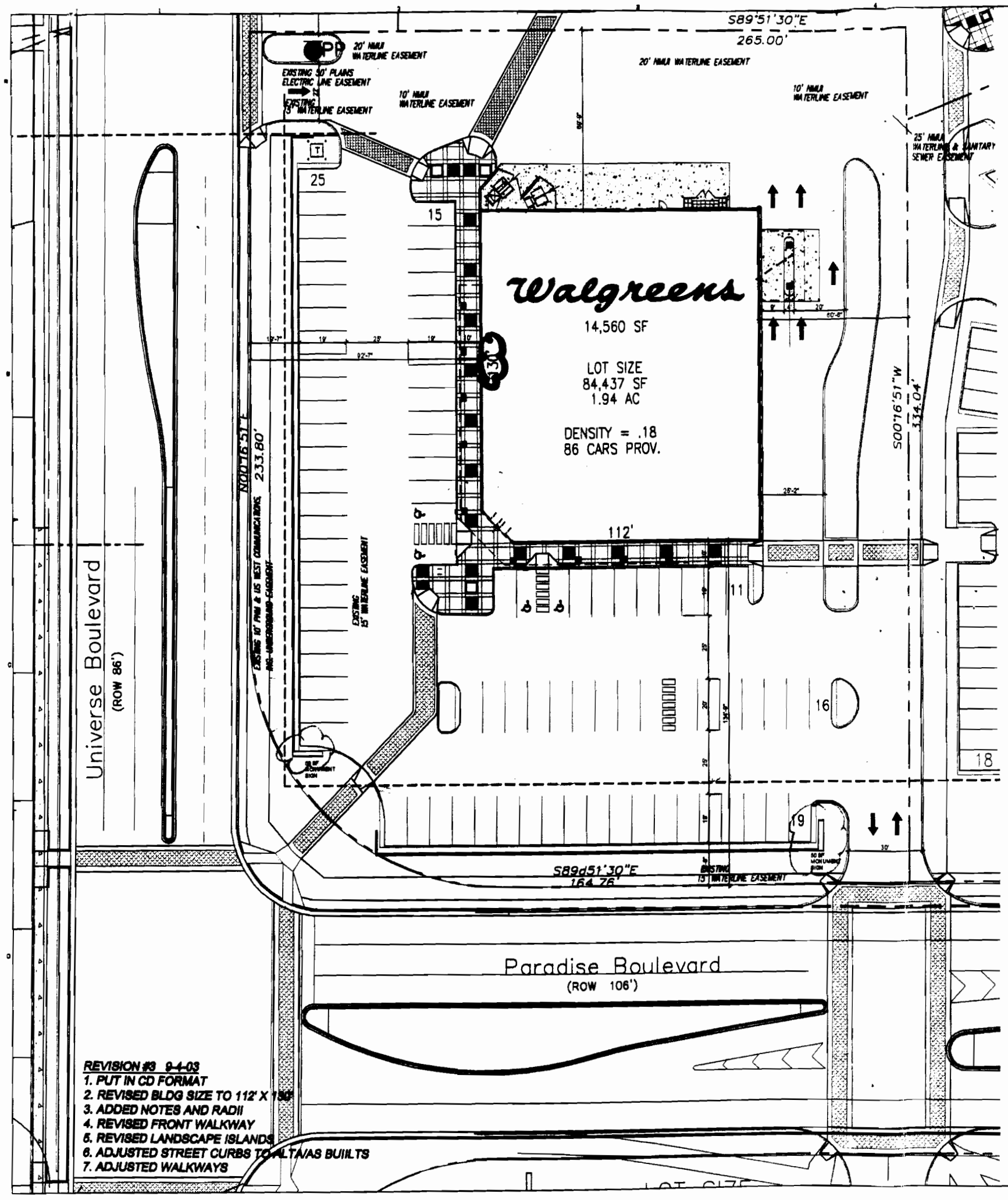
Volume = Weighted D * Total Area

Flow = Qa * Aa + Qb * Ab + Qc * Ac + Qd * Ad

Pond Calculations

Pond 1

Elevation	Area (sf)	Area (ac)	Vol (ac-ft)	Cum Vol
5110	6383	0.1465335	0	0
5111	7789	0.1788108	0.1626722	0.16
5112	9266	0.2127181	0.1957645	0.36
5113	10813	0.2482323	0.2304752	0.59



KEYED NOTES:

1. COMPACTOR LOCATION - PAD AND ENCLOSURE TO CURRENT CITY OF CLARK COUNTY REQUIREMENTS.
2. RAISED AND TEXTURED WALKWAYS. SEE CIVIL.
3. WALGREENS 50 SF MONUMENT SIGN
4. NEW LANDSCAPE BUFFERS/ISLANDS
5. BICYCLE RACK LOCATION - 4 BIKES.
6. STRIPING, YELOW, 4" WIDE (TYPICAL)
7. HANDICAPPED SPACE WITH PAINTED SYMBOL AND SIGN PER CITY OF ALBUQUERQUE REQUIREMENTS.
8. STANDARD ASPHALT PAVING FOR CAR TRAFFIC-2 1/2" ASPHALTIC CONCRETE OVER 6" SUBGRADE.
9. 2-LANE PHARMACY DRIVE-THRU
10. HC RAMP. RED STAINED CONCRETE.
11. STRIPED HANDICAP ACCESS AISLE.
12. HEAVY DUTY ASPHALT PAVING FOR TRUCK TRAFFIC-4" ASPHALTIC CONCRETE OVER 6" SUBGRADE.
13. YELLOW PAINTED ARROW AND 24' HIGH LETTERS.
14. TRANSFORMER LOCATION
15. EXISTING ASPHALT BIKE TRAIL
16. NEW CURB CUT

RADIUS INFORMATION:

(1) RADIUS = 2'-0"	(7) RADIUS = 25'-0"
(2) RADIUS = 3'-0"	(8) RADIUS = 30'-0"
(3) RADIUS = 5'-0"	(9) RADIUS = 40'-0"
(4) RADIUS = 10'-0"	(10) RADIUS = 50'-0"
(5) RADIUS = 15'-0"	(11) RADIUS = 60'-0"
(6) RADIUS = 20'-0"	(12) RADIUS = 100'-0"

ADMINISTRATIVE
DEVELOPMENT PLAN AMENDMENT
FILE NO. AA-01593
Project 1000390 Various
minor adjustments including signs
Bob Lawler 10/16/03
PLANNING DIRECTOR DATE

RECEIVED
JUN 23 2004
HYDROLOGY SECTION

SITEPLAN
SCALE: 1"=20'-0"

Walgreens

FACILITIES PLANNING AND DESIGN
200 WILMOT ROAD DEERFIELD, IL
708-940-2500 60015

PROJECT TYPE

DRAWINGS/SPECIFICATIONS BY:
☐ WALGREENS' CONSULTANT
■ LANDLORD'S CONSULTANT

ALL CONSTRUCTION WORK UNLESS NOTED OTHERWISE BY
☐ WALGREENS' CONTRACTOR
■ LANDLORD'S CONTRACTOR (TURNKEY CONSTRUCTION)

STORE	BUILDING
NEW ■	NEW ■
REMODELING ☐	EXISTING ☐
RELOCATION ☐	NEW SHELL ONLY ☐
OTHER ☐	

PROJECT INFORMATION

Job # 9052(63)
Folder # 7
Date: 10/17/03
Initials: ADBS

NO.	DATE	BY	DESCRIPTION	COMBT
8				
7				
6				
5				
4				
3	9/4/03	ADB	CD FORMAT/ AS BUILTS	
2	8/26/03	MPB	MOVED BLDG. 28' SOUTH	
1	8/22/03	MPB	REVISED PROP. LINE/PARKING	

REVISIONS

CERTIFICATION AND SEAL

I HEREBY CERTIFY THAT THIS PLAN AND SPECIFICATION WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY REGISTERED ARCHITECT OR ENGINEER UNDER THE LAWS OF THE STATE OF NEW MEXICO AS SIGNIFIED BY MY HAND AND SEAL.

PROJECT NAME
WALGREENS STORE
(NEC) UNIVERSE & PARADISE
ALBUQUERQUE, NEW MEXICO

GEORGE RAINHART, ARCHITECT & ASSOCIATES P.C.
2326 SAN PEDRO NE., SUITE 2-B
ALBUQUERQUE, NEW MEXICO 87110
PHONE (505) 884-9110 FAX (505) 837-9877
www.gra-arch.com

DRAWING TITLE
FLOOR PLAN

DATE	STORE NO.	DRAWING NO.
9/9/03	2083	A1.0
DRAWN BY: MPB	SCALE: 1" = 20'	
REVIEWED BY:	RELEASED TO CONSTRUCTION:	OF 53 DWGS.